



SEQUENCE LISTING

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SEP 07 2000
TECH CENTER 16042800

<110> Jerry Pelletier
Philippe Gros
Michael DuBow

<120> DNA SEQUENCES FROM STAPHYLOCOCCUS AUREUS
BACTERIOPHAGE 77 THAT ENCODE ANTI-MICROBIAL POLYPEPTIDES

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<150> 60/110,992

<151> 1998-12-03

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<212> DNA

<213> Staphylococcus aureus bacteriophage 77

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B1
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<210> 12
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<400> 15
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<400> 17
ctcgaggaaa aggaggcgga tccgctt 27

<210> 18
<211> 237
<212> PRT
<213> Staphylococcus aureus bacteriophage 77

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Arg Phe Glu Gly Glu Lys Asn His Lys Gly Phe Tyr Pro Lys Phe Lys
35 40 45
Gln Gly Glu Ile Val Phe Val Asp Phe Gly Ile Asn Val Asn Lys Glu
50 55 60

Phe	Ser	Asn	Ser	His	Phe	Ala	Ile	Val	Met	Asn	Lys	Asn	Asp	Ser	Asn
65					70					75					80
Thr	Glu	Asp	Ile	Val	Asn	Val	Ile	Pro	Leu	Ser	Ser	Lys	Glu	Asn	Lys
				85					90					95	
Lys	Tyr	Leu	Lys	Met	Asn	Phe	Asp	Leu	Lys	Trp	Glu	Tyr	Tyr	Leu	Arg
			100					105					110		
Leu	Phe	Leu	Asn	Leu	Ile	Ser	Ala	Gln	Asn	Asn	Ser	Ala	Ile	Leu	Lys
		115					120					125			
Glu	Val	Phe	Asp	Lys	Lys	Tyr	Gln	Lys	Asn	Asn	Thr	Glu	Phe	Ile	Thr
	130					135					140				
Lys	Asp	Tyr	Phe	Ile	Glu	Phe	Ile	Ser	Asp	Ser	Leu	Glu	Ile	Glu	Asn
145					150					155					160
Lys	Leu	Asn	Lys	Ile	Asp	Arg	Asn	Ile	Asn	Asn	Ile	Val	Ser	Ala	Ile
			165					170							175
Asp	Lys	Val	Lys	Lys	Leu	Lys	Gly	Asn	Ser	Tyr	Ala	Cys	Ile	Asn	Ser
		180						185					190		
Phe	Gln	Pro	Ile	Ser	Lys	Phe	Arg	Ile	Arg	Lys	Val	Leu	Pro	Gln	Lys
		195					200					205			
Ile	Lys	Asn	Pro	Val	Ile	Asp	Ser	Ser	Asp	Ile	Met	Leu	Leu	Ile	Asn
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<210> 19

<211> 216

<212> PRT

<213> Staphylococcus aureus bacteriophage 77

<400> 19

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Val	Leu	Tyr	Ser	Val	Lys	Glu	Ile	Phe	Arg	Tyr	Phe	Thr	Asp	Ser	Asn
			20					25				30			
Leu	Gln	Arg	Lys	Lys	Ile	Asn	Leu	Glu	Gln	Ile	Tyr	Pro	Ile	Tyr	Leu
		35				40					45				
Asp	Cys	Phe	Lys	Lys	Ala	Lys	Lys	Met	Ile	Gly	Ala	Tyr	Ile	Ile	Pro
	50				55					60					
Thr	Glu	Gln	His	Glu	Phe	Leu	Asp	Phe	Phe	Asp	Ile	Glu	Val	Phe	Asn
65				70					75					80	
Asn	Leu	Asp	Lys	Gln	Ser	Lys	Lys	Ala	Tyr	Glu	Asn	Val	Ile	Gly	Phe
			85					90					95		
Arg	Gln	Met	Ile	Asn	Leu	Ser	Asn	Arg	Val	Lys	Ala	Met	Glu	Asp	Phe
		100					105					110			
Lys	Met	Ser	Phe	Asn	Asn	Glu	Phe	Ser	Thr	Asn	Gln	Ile	Phe	Phe	Asn
	115					120					125				
Pro	Ser	Phe	Val	Met	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Glu	Tyr	Gln	Lys
	130					135					140				
Asp	Ile	Ser	Tyr	Leu	Lys	Asn	Ile	Ile	Asn	Lys	Met	Asn	Glu	Asn	Arg
145				150					155						160
Ala	Tyr	Asn	His	Ile	Asp	Ser	Phe	Ile	Thr	Ser	Glu	Tyr	Arg	Arg	Lys
			165					170					175		
Ile	Asn	Asp	Tyr	Asn	Leu	Tyr	Leu	Asp	Lys	Phe	Glu	Glu	Gln	Phe	Ser
	180						185					190			
Gln	Lys	Phe	Lys	Ile	Asn	Arg	Thr	Ser	Ile	Lys	Glu	Arg	Ile	Ile	Ile
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Cont

210

215

<210> 20

<211> 212

<212> PRT

<213> Staphylococcus aureus bacteriophage 77

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 Arg Lys Lys Ile Asn Leu Glu Gln Ile Tyr Pro Ile Tyr Leu Asp Cys
 35 40 45
 Phe Lys Lys Ala Lys Lys Met Ile Gly Ala Tyr Ile Ile Pro Thr Glu
 50 55 60
 Gln His Glu Phe Leu Asp Phe Phe Asp Ile Glu Val Phe Asn Asn Leu
 65 70 75 80
 Asp Lys Gln Ser Lys Lys Ala Tyr Glu Asn Val Ile Gly Phe Arg Gln
 85 90 95
 Met Ile Asn Leu Ser Asn Arg Val Lys Ala Met Glu Asp Phe Lys Met
 100 105 110
 Ser Phe Asn Asn Glu Phe Ser Thr Asn Gln Ile Phe Phe Asn Pro Ser
 115 120 125
 Phe Val Met Ile Ala Ile Ile Asn Glu Tyr Gln Lys Asp Ile Ser Tyr
 130 135 140
 Leu Lys Asn Ile Ile Asn Lys Met Asn Glu Asn Arg Ala Tyr Asn His
 145 150 155 160
 Ile Asp Ser Phe Ile Thr Ser Glu Tyr Arg Arg Lys Ile Asn Asp Tyr
 165 170 175
 Asn Leu Tyr Leu Asp Lys Phe Glu Glu Gln Phe Ser Gln Lys Phe Lys
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 Ile Asn Arg Thr Ser Ile Lys Glu Arg Ile Ile Ile Asn Leu Asn Lys
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 Arg Arg Phe Lys
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<210> 21

<211> 85

<212> PRT

<213> Staphylococcus aureus bacteriophage 77

<400> 21

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 Ile Gln Val Lys Asp Met Asn Asn Val Pro Ile Lys His Ala Tyr Val
 35 40 45
 Val Asp Glu Asn Asp Leu Asp Met Ala Ser Asp Leu Phe Asn Gln Ala
 50 55 60
 Ile Asp Glu Trp Ile Glu Glu Asn Thr Asp Gln Asp Arg Leu Ile Asn
 65 70 75 80
 Leu Val Met Lys Trp
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<210> 22
 <211> 86
 <212> PRT
 <213> Staphylococcus aureus bacteriophage 77

<400> 22
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 Ile Gln Val Lys Asp Met Asn Asn Val Pro Ile Lys His Ala Tyr Val
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 Val Asp Glu Asn Asp Leu Asp Met Ala Ser Asp Leu Phe Asn Gln Ala
 50 55 60
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<210> 23
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 35 40 45
 Cys Phe Phe Lys Glu
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<210> 24
 <211> 53
 <212> PRT
 <213> Staphylococcus aureus bacteriophage 77

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 Cys Phe Phe Lys Glu
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 <213> Staphylococcus aureus bacteriophage 77

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 20 25 30
 Tyr Asp Leu Phe Ile Gln Lys Leu Ala Glu Arg His Thr Arg Pro Ala
 35 40 45
 Ile Val Glu Tyr
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<210> 26
 <211> 50
 <212> PRT
 <213> Staphylococcus aureus bacteriophage 77

<400> 26
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 Tyr Ala Gln Lys Leu Ile Asp Glu Ala Gln Gly Asp Glu Asn Arg Leu
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 Tyr Asp Leu Phe Ile Gln Lys Leu Ala Glu Arg His Trp Ala Ile Val
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 Glu Tyr
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 Lys Leu Phe Ile Leu Lys Gly His Met Gly Ile Ser Ile Gln Val Lys
 35 40 45
 Asp Met Asn Asn Val Pro Ile Lys His Ala Tyr Val Val Asp Glu Asn
 50 55 60
 Asp Leu Asp Met Ala Ser Asp Leu Phe Asn Gln Ala Ile Asp Glu Trp
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 Lys Trp

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 35 40 45
 Asp Met Asn Asn Val Pro Ile Lys His Ala Tyr Val Val Asp Glu Asn
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 Asp Leu Asp Met Ala Ser Asp Leu Phe Asn Gln Ala Ile Asp Glu Trp
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 Lys Trp

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 35 40 45
 Gln Gly Glu Ile Val Phe Val Asp Phe Gly Ile Asn Val Asn Lys Glu
 50 55 60
 Phe Ser Asn Ser His Phe Ala Ile Val Met Asn Lys Asn Asp Ser Asn
 65 70 75 80
 Thr Glu Asp Ile Val Asn Val Ile Pro Leu Ser Ser Lys Glu Asn Lys
 85 90 95
 Lys Tyr Leu Lys Met Asn Phe Asp Leu Lys Trp Glu Tyr Tyr Leu Arg
 100 105 110
 Leu Phe Leu Asn Leu Ile Ser Ala Gln Asn Asn Ser Ala Ile Leu Lys
 115 120 125
 Glu Val Phe Asp Lys Lys Tyr Gln Lys Asn Asn Thr Glu Phe Ile Thr
 130 135 140
 Lys Asp Tyr Phe Ile Glu Phe Ile Ser Asp Ser Leu Glu Ile Glu Asn
 145 150 155 160
 Lys Leu Asn Lys Ile Asp Arg Asn Ile Asn Asn Ile Val Ser Ala Ile
 165 170 175
 Asp Lys Val Lys Lys Leu Lys Gly Asn Ser Tyr Ala Cys Ile Asn Ser
 180 185 190
 Phe Gln Pro Ile Ser Lys Phe Arg Ile Arg Lys Val Leu Pro Gln Lys
 195 200 205
 Ile Lys Asn Pro Val Ile Asp Ser Ser Asp Ile Met Leu Leu Ile Asn

B1
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210 215 220
Arg Ile Asn Asn Asn Ile Leu Gln Ile Pro Asp Ile Arg
225 230 235

31
Cont

